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CLAIMS

1. A stuffing seal (1) comprising:
a case (3) provided with an axial hole (3a) for the passage of a stem (103) being mobile with respect to said case (3):
5 a gasket or packing (5) arranged in a seat (3b) formed within said hole (3a) between said case and said stem; and
a stuffing box (7) for compressing said packing (5) between said case (3) and said stem (103),
characterised in that it provides releasable means (11) for performing
10 an axial thrust on said stuffing box (7) so as to cause a compression of said packing (5) between said case and said stem.
2. A stuffing seal (1) according to claim 1, wherein said case (3) and said stuffing box (7) are interconnected by at least a blocking pivot (9a, 9b) parallel to said stem, said stuffing box (7) and/or said case (3)
15 being sliding with respect to said pivot for allowing the axial compression of said packing (5).
3. A stuffing seal (1) according to claim 2, wherein said pivot (9a, 9b) comprises a portion (10a) axially extending outside said stuffing box (7), on said portion being provided said releasable means (11).
- 20 4. A stuffing seal (1) according to claim 1, wherein control means (15, 17) are provided for causing the release of said releasable means (11).
5. A stuffing seal (1) according to claim 1, wherein said releasable means (11) comprise at least one elastically deformed element and control means (15, 17) for causing the release thereof.
- 25 6. A stuffing seal (1) according to claim 5, wherein said elastically deformed element is a spring (11).
7. A stuffing seal (1) according to claim 4 or 5 or 6, wherein said control means comprise a mobile element (15) which can take a first position wherein said releasable means (11) are retained and a second
30 position wherein said releasable means (11) are released for performing a thrust along the axis of said stem (103) against said stuffing box (7).
8. A stuffing seal (1) according to claim 7, wherein said mobile element is an oscillating lever (15) with the fulcrum (15a) pivoted to said case (3), said lever comprising at an end a blocking tooth (15a) for
35 retaining said releasable means (11).
9. A stuffing seal (1) according to claim 8, wherein said lever (15) is a lever of the first kind comprising at the opposite end with respect to

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said tooth (15a) a control surface (15c) whereon it is possible to act for letting said lever (15) pass from said first to said second position.

10. A stuffing seal (1) according to any of claims from 7 to 9, wherein said mobile element (15) is driven by means of an actuator device
5 (17) driven by a leak detector (16).

11. A stuffing seal (1) according to claim 10, wherein said leak detector (16) comprises a chamber (19), wherein the fluid coming from a leak flows.

12. A stuffing seal (1) according to claim 11, wherein said actuator
10 device is a flexible membrane (17) which hermetically separates at least one portion of said chamber from the external environment.

13. A stuffing seal (1) according to claim 8, wherein means (13b, 27) for permanently partially compressing said packing (5) in an axial direction are further provided.

14. A stuffing seal (1) according to claim 13, wherein the thrust
15 performed on said packing (5) by said compression means is considerably lower than the thrust performed by said releasable means (11).

15. A stuffing seal (1) according to claim 13 or 14, wherein said
20 compression means comprise a spring (27) interposed between said stuffing box (7) and said tooth (15b) of said lever (15).

16. A stuffing seal (1) according to claim 13 or 14, wherein said
25 compression means comprise a blocking pivot (9b) parallel to said stem (103) placed between said case (3) and said stuffing box (7), provided with a nut (13b) which can be closed against said case (3) or against said stuffing box (7) for causing the axial compression of the packing (5).

17. A stuffing seal (1) according to any of the preceding claims,
30 wherein between the bottom of said seat (3b) within said hole (3a) and said packing (5) a porous ring (23) and a plane washer (25) are further provided in sequence thanks to which said packing (5) is axially compressed against said stuffing box (7) when the pressure of a fluid acts against said porous ring (23).

18. A stuffing seal (1) according to claim 17, wherein said porous ring is a sintered metal net ring.

19. A stuffing seal (1) according to any of the preceding claims,
35 wherein said packing (5) comprises a series of concentric rings (6) preferably made of metal or polymeric resin.

20. A valve (101) for fluids comprising:

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a stem (103) for controlling the opening and the closing of the valve,
a primary seal (105) which maintains hermetically separated from the
external environment the fluid flowing through said valve (101),

5 an auxiliary seal able to intervene for maintaining hermetically
separated from the external environment the fluid flowing through said
valve (101) in case of breakage or misoperation of said primary seal (105),
characterised in that said auxiliary seal is a stuffing seal (1)
according to any of claims from 1 to 19.

10 21. A valve (101) for fluids according to claim 20, wherein said
primary seal further comprises a bellow seal (105) and a leak detector (16),
said leak detector (16) comprising a chamber (19), wherein the fluid flows
in case of leak, connected through a channel (21) to the volume (107)
inside said bellow seal (105).

15 22. A valve (101) for fluids according to claim 21, wherein said
primary seal comprises a multilayer bellow seal (105) and a leak detector
(16), said leak detector (16) comprising a chamber (19), wherein the fluid
flows in case of leak, connected through a channel (21) to the gap (105d)
defined between two layers of said multilayer bellow seal (105).